

Course manual “Creative urban technologies: exploring and navigating the smart and social city”

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- Minor Creative Cities: <http://students.uu.nl/en/hum/creative-cities>.
- Course description in Osiris: <http://bit.ly/29SxHll>.
- Blackboard link: <http://bit.ly/29zch8L>.
- Time/location lectures: Tuesdays 11.00 - 12.45, [Drift 25](#), room 102 (starting Sept. 13)
- Time/location working groups: WG1 on Thursdays 15:15 – 19:00, [Drift 25](#), room 002 (starting Sept. 15) and WG2 13:15 – 17:00, [Drift 25](#), room 302 (starting Sept. 16).

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1. COURSE OUTLINE

A. About the minor *Creative Cities*

The minor Creative Cities caters to students interested in emerging artistic practices, subcultures and new media and how these phenomena relate to creative dynamics in society. Investigating cities, urban citizenship and the multidimensional dynamics between them obviously suggests an interdisciplinary academic approach while simultaneously offering endless possibilities for exploring connections between theory and practice. All four courses literally open the door to the urban world immediately beyond the university classroom and provide students with theoretical concepts, practical tools, and creative space to explore it. The minor consists of the following four courses:

1. Creative urban technologies: exploring and navigating the smart and social city; Level 2, *Michiel de Lange*.
2. Wild Years: social theories on youth and generations; Level 2, *Peter Selten*.
3. Community Art: Practice and Theory; Level 3, *Eugene van Erven*.
4. The City as Stage: Critical Interventions⁴ in Public Space; Level 3, *Sigrid Merx*.

B. About the course *Creative Urban Technologies*

Aim: The course aims to introduce students to the burgeoning cross-disciplinary field that studies the relationships between digital media technologies and today's cities, with a specific focus on the phenomenon of the “smart city”. Students investigate and develop insight into how digital technologies shape city life. Under guidance, students will read literature thoroughly and critically, learn to differentiate between various types and sources, frame theoretical discussions in the field, position themselves, develop new ways of conceptualizing the treated issues, find sources, and undertake a research project. Students are trained in developing their ability to deploy academic skills in written and oral presentations, individually and as part of a group. Attention is given to students' capacity to reflect critically on current issues, practices, discourses, and academic research about smart cities, and the ability to develop an appropriate research method for their research. All activities should meet the requirements of the manual "[Academische vaardigheden](#)" (in Dutch).

Content: A wide variety of digital media technologies have come to shape the organization and experience of urban life. These urban technologies influence how we live, work, travel, meet, and spend our leisure time in the so-called “smart city”, the city augmented with digital technologies. Examples include mobile

communication, wireless internet access, GPS navigation, rfid access cards, media facades, embedded sensors and the Internet of Things, camera surveillance, location based services, and pervasive games. The “smart city” has become a popular corporate and policy term that refers to the use of digital technologies to optimize urban infrastructures and processes. Frequently, such technologies are designed and implemented by large corporations and institutions. Moreover, they tend to act in the background of everyday life and remain relatively invisible. This seems to place citizens in a rather passive role as mere consumers, or as subjects of control through data profiling and surveillance. The central question in this course is how urbanites use digital technologies in smart and creative ways to actively shape their own uses and experiences of the “smart city”. We investigate the role of urban technologies in specific fields like public space, media art, play and games, citizen participation and co-creation, (big) data and privacy/surveillance, and identity construction.

2. ASSIGNMENTS

Below an overview of the required assignments for the course.

Note: All written assignments must be posted on Blackboard’s discussion forum in a single individual thread, as inline text (no attachments, except for mid-term assignment and final paper). For your first assignment, please start a thread titled with your name. See example on Blackboard. Proceed by posting the other assignments as replies to yourself, changing only the week numbers.

Note2: All assignments must contain your name, student number, title of your assignment, and a list of references.

A. Individual assignments - 20% of final grade

Individual assignments consist of the following:

i. Two weekly propositions (6 times) – 50 words in total.

Each week you raise two relevant propositions to spur the debate during working group sessions. These propositions are based on the course literature. You could raise attention to a contestable argument of an author or offer a critique. You are encouraged to link the propositions to real world examples – seeing how the theories hold up to exemplary experiences. One of the propositions should be analytical: you take a stance based on the arguments presented in the course literature. The other proposition should focus on the application of the theories: how do the theoretical ideas come back in example cases. The propositions will be graded on how well you analyze the available literature, how critical your perspective is and how you use this proposition to introduce an own academic line of inquiry.

Weekly assignments must meet the following conditions:

- Two propositions to spark the debate. Together 50 words max. Be prepared to bring these in during the working groups! Always add your name and student number!
- Students doing their team presentation do not need to submit a written assignment in that week.
- **Deadlines:** Every Tuesday before 17:00 in the discussion forum on Blackboard. Please post as inline text (no attachments please). Please respect these deadlines in order for the week teams to be able to incorporate your propositions in their presentations.
- **Note:** the first assignment is already due in week 1 but you get more time: Friday 16 Sept. 17:00.

ii. Paper proposal in week 3 – 500 words max

In week 3 students submit an initial research proposal for their final paper. The final assignment can have a variety of forms but in all versions there needs to be a critical reflection of the phenomenon studied. There are three possible forms of the final paper. The requirements for the paper proposal are listed below the

version:

1. *Design Proposition:* You will design an intervention that will draw attention to some aspect of the smart city and/or the role of the smart citizen. Preferably this design can actually be actuated but this is not a necessity. For the proposal you must explain the following elements:
 - a. An initial description of the design proposed (How are you going to address the smart city)
 - b. The smart city or smart citizen issue addressed by your design (What are you going to address)
 - c. A brief explanation of the relevance of why this issue should be addressed (Why should this topic be addressed)

2. *Experience Review:* You must participate in a smart city event, urban game or playful installation that deals with city issues. The goal is to review this experience critically. In the proposal you must explain the following elements:
 - a. What experience are you going to review?
 - b. Why is this experience worth reviewing?
 - c. How does this experience relate to the smart city?
 - d. Within what framework are you critiquing this experience?

3. *Essay:* Write a more theoretical paper about one of the weekly themes or a related topic relevant to the course. The proposal should convey the elements of “de schijf van vijf”:
 - a. 1. Phenomenon: the topic you wish to research and the case you will use (what are you researching?). Often introduced through an anecdote or original observation.
 - b. 2. Question and hypothesis/argument: a well-formulated question about your phenomenon that cannot be answered with a simple yes/no, but is not too broad either; plus the expected outcomes and/or point you want to make (which question are you asking and what are the expected outcomes?). The research question often needs to be broken down into subquestions, and key notions must be operationalized.
 - c. 3. Positioning: providing reasons for its academic relevance and perhaps also societal relevance (why are you researching this?)
 - d. 4. Theory: the perspective and concepts you use to research the topic (within what framework are you addressing this phenomenon?)
 - e. 5. Method: the approach you use to gather data and increase your understanding (how you are going to conduct the research to find answers to your question?).
 - The order may vary but all of these points should be addressed in the proposal. It is not necessary use separate headers, instead try to incorporate these points into a logical structure.
 - **Deadline:** The proposal must be handed in via Blackboard on **Tuesday 27 Sept.** at 17:00, and is peer reviewed in week 4.

Note: It is recommended to work on the same topic or case for your paper and the mid-term assignment!

iii. Mid-term assignment in week 5 – 750 words max.

For the mid-term assignment in week 5 students carry out a case study. This takes the form of an

independent investigation of the intersections of digital media technologies and urban life, critically reflect on this using academic literature and course lectures, and frame issues for further research and discussions. The aim of this assignment is to connect theory and practice through a combination of observation, participation and reflection.

- **Length** 750 words max
- **Deadline:** Tuesday 11 October 17:00 on Blackboard in your own single thread (inline or as a pdf attachment).
- **Important:** as always, use the course literature and/or other academic sources for your assignment!

It is recommended to connect this assignment to the final paper. Possibilities:

1) Urban Play and its Players

Find and analyze an urban game, a playful intervention or a playful installation that is explicitly dealing with the city or the urban. Briefly explain why you chose that game or form of play. What underlying (implicit) views of the role of citizens can you discern? While playing, what actions are allowed and which are made impossible? What does this player model mean for the participation in the city? In short, you must provide a critical analysis of the implied player of an urban game by reflecting on the experience of play, player roles, game outcomes, etc.. Some examples will be provided during class.

2) Design a hypothetical “smart solution” that gives rise to debate through a “city hack”

By designing a prototype or ‘probe’ you can question so-called “smart technologies”, by eliciting debate. You will make a sketch, drawing, or other kind of documentation of your proposed design intervention. Pay special attention to goal you pursue with your prototype or “hack” and what specific design decisions contribute to this. You are encouraged to make this prototype as feasible as possible and maybe even carry it out, but ultimately letting your imagination run free (critically though) is also allowed. You will then use this to raise questions and points for discussion about what this intervention is supposed to address.

Examples

Mark Shepard’s Sentient City Survival Kit - <http://survival.sentientcity.net>.

Next Nature - <http://www.nextnature.net/tag/design-for-debate/>.

Dunne & Raby about ‘critical design’ - <http://www.youtube.com/watch?v=-bns4qcRRYY>.

The “adversarial design” interventions discussed in Morozov’s chapter from week 2.

The Hackable City project website: <http://thehackablecity.nl>.

Play the City website: <http://www.playthecity.nl/11349/en/digital-urbanism>

B. Team assignments - 20 % of final grade

During the first working group meeting students are organized in six teams of about 4 to 5 people. Teams are expected to meet at least once a week outside of class meetings and discuss assigned texts and other sources, continuously monitoring their relevance and possible uses for both the team’s class meeting lecture and each team member's individual research paper project. These are the team tasks:

i. Team presentation

Each week one of the six teams will prepare and be responsible for leading the first part of one of the class meetings (ca. 30 minutes). Teams will scrutinize and, if possible, contextualize the assigned texts and place them within relevant theoretical and historical fields. Make sure not to provide simple summaries; course participants will have read the texts, so regard them as colleagues with similar interests who happen to want to know more about the subject from you, the experts! Seek connections between the texts (as well as with other texts you think are interesting), critically rethink views and opinions, refer to similar or antithetical sources and reflect on their use. Illustrate the application or consequences of the text ideas through practical examples such as pervasive games or artistic installations. Try to make it an interactive

session by raising lots of issues for group discussions and providing examples or cases to ponder. Teams are advised to use the propositions handed in by their fellow students as part of their weekly assignments to guide the debate. You may use relevant audiovisual material, interactive platforms, etc., as tools or illustrations or as case material to make your own point.

ii. Peer review in week 4

Teams will do peer reviews of each other’s paper proposals in week 4, and post these reviews on Blackboard (under both their own thread and the threads of fellow students). Peer reviews must pay attention to the presence and strength of elements mentioned in the paper proposal description.

- Length: ca. 250 words per review.
- **Deadline:** Post on Blackboard before Tuesday 29 Sept. 17:00.

Students are strongly advised to repeat this team-based peer review procedure among themselves to prepare for the final paper.

C. Individual final paper - 60% of final grade

Students will write a final paper of about 3000 words. Either write a report on doing an experiment with a creative urban technology and connecting this to course literature, review a smart city experience, or write a more theoretical paper about one of the weekly themes or a related topic relevant to the course. Students are advised to choose a similar topic as the one explored in the mid-term assignment. Use a concrete case study of a particular urban technology in order to answer the main question of this course: *how urban technologies are used creatively to help shape urban life*. Central in this assignment is a critical reflection on the many smart city cases out there. Especially towards the end of the course we shall dedicate ample time during the working group hours to discuss final paper progress.

- The final paper should be 3000 words (± 10%).
- The **deadline** for handing in your **final paper is Friday 4 November 2016** before 17:00.
- Please hand in papers via Ephorus, using the course instructor's e-mail address as the submission code.
- Also hand in a print version in the dedicated pigeon hole on Kromme Nieuwegracht 20 in Utrecht. Students who don’t live in Utrecht may also send their hardcopy version via snail mail to the instructor's home address (ask for address via e-mail).

See example scheme below. The grey block depends on your team membership (in this example week 2).

	Wk 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 10
<i>Weekly reviews</i>	x		x	x	x	x	x		
<i>Team presentation</i>		x							
<i>Written assignments</i>			Paper proposal	Peer review proposal	Mid term assignment			Final paper due	Grades

3. CLASS MEETINGS SETUP

Below an indication of how the meetings are structured. Changes are possible as needed.

A. Class meetings - First part

The subgroup that is responsible for leading the class meeting will start the session by doing a 30-minute

lecture and discussion. Before the break we will briefly reflect on the team presentation and identify possible aspects for improvement.

B. Class meetings - Second part

After a break, we will dedicate time to discussing the week texts in further depth. An active attitude from students is expected here: you should raise questions, points for debate, and criticize the author's ideas (of course using sound arguments!) and forward your own ideas. Students are advised to also use this time to develop and test ideas for their final papers. Aside from discussing the literature, we will expand more on theories and methods, and discuss how to read texts, how to work with hypotheses, and how to write with a specific audience in mind.

C. Class meetings - Third part

After another break, the remaining time of the contact hours can be used for further questions, discussing paper proposals, teacher feedback and/or group meetings.

4. COURSE COMPLETION

The course is successfully completed when these conditions are met:

- Students have handed in all required weekly assignments on time (20% of final grade), with a minimum total grade of 5.5. An average score below 5.5 means students may not hand in their final paper. Failure to hand in an assignment on time will result in an irreparable 1. Students who miss more than one assignment cannot complete the course. The grading scale is from 1 (lowest) to 10 (highest).
- Students have participated in the team assignments: presentation + peer reviews (20%), with a minimum grade of 5.5.
- Students have handed in their final paper on time (60%), with a minimum grade of 5.5. The **deadline is Friday November 4th 2016** before 17:00. Students have the right to repair a 4 or higher. Only final papers can be repaired.
- Students have attended all class meetings. If students miss one class they need to notify the instructor in advance and compensate with an extra assignment. Students who are absent from more than one class cannot complete the course.

Fraud and Plagiarism

Please read the rules concerning fraud and plagiarism: <http://students.uu.nl/en/practical-information/academic-policies-and-procedures/fraud-and-plagiarism>. These rules apply not only to the final paper but to every assignment.

5. CONTACT

Please use Blackboard's discussion forum to ask questions about the course. Not only will you likely get quicker answers from other students and from the instructor, your question may also help fellow students. E-mail the course coordinator if you feel that you need to discuss a more personal matter. Notify the working group instructor via e-mail of a successful group change, or of any class absence at s.c.martens@uu.nl.

6. LITERATURE

Note: many URLs only work from within the university network, or after logging in with your account.

Week 1. Creative cities, urban technologies

As a general introduction both to the Creative Cities minor and to this course, we will get to know key

notions like the creative city and smart city. What do they entail? What is a city, what is creativity and how is it tied to city life? What is the role of digital media technologies in creating smart cities?

Brenner, Neil, and Christian Schmid. 2015. "Towards a New Epistemology of the Urban?" *City* 19 (2-3): 151-182. <http://urbantheorylab.net/publications/towards-a-new-epistemology-of-the-urban/>.

Florida, Richard L. 2012. *The Rise of the Creative Class: Revisited*. New York: Basic Books. Ch. 1 "The Transformation of Everyday Life" (1-12) + excerpt from Ch.3 "The Creative Class" (54-62). <https://db.tt/CUB4QiMq>.

Hill, Dan. *The Street as Platform*. 2008. <http://www.cityofsound.com/blog/2008/02/the-street-as-p.html>.

Optional

de Lange, Michiel. 2014. The "urban" in "urban media". Short position paper, Utrecht University. <https://db.tt/jxltuugE>

Wirth, Louis. 1938. "Urbanism as a way of life." *The American Journal of Sociology* 44 (1): 1-24. <http://bit.ly/1AGC3Qt>.

Landry, Charles, and Franco Bianchini. 1995. *The Creative City*. London: Demos. www.demos.co.uk/files/thecreativecity.pdf.

Karlsson, Charlie. 2011. "Clusters, Networks And Creativity." In *Handbook of Creative Cities*, eds. David E. Andersson, Åke E. Andersson and Charlotta Mellander. Cheltenham, UK; Northampton, MA: Edward Elgar Pub. 85-114. <http://bit.ly/XnNHka>.

Week 2. Smart cities, smart citizens

In week 2 we follow up on the first week by looking at how digital technologies in today's smart and social cities are forwarded to address various urban problems.

Albino, Vito, Umberto Berardi, and Rosa Maria Dangelico. 2015. "Smart Cities: Definitions, Dimensions, Performance, and Initiatives." *Journal of Urban Technology* no. 22 (1):3-21. <http://bit.ly/1FkMk5f>.

Hemment, Drew, and Anthony Townsend, eds. 2013. *Smart Citizens*. Manchester: FutureEverything Publications. Pages 1-3 and 9-12. <http://bit.ly/1LWDcLL>.

Morozov, Evgeny. 2013. *To Save Everything, Click Here: The Folly of Technological Solutionism*. New York: PublicAffairs. Ch. 9 "Smart Gadgets, Dumb Humans" pp. 318-352. <http://bit.ly/1JMS8Fm>.

Optional

Caragliu, Andrea, Chiara Del Bo, and Peter Nijkamp. 2011. "Smart Cities in Europe." *Journal of Urban Technology* 18 (2): 65-82. <http://dx.doi.org/10.1080/10630732.2011.601117>.

Allwinkle, Sam, and Peter Cruickshank. 2011. "Creating Smart-er Cities: An Overview." *Journal of Urban Technology* 18 (2): 1-16. <http://www.tandfonline.com/doi/pdf/10.1080/10630732.2011.601103>.

Shepard, Mark. 2011. "Toward the Sentient City." In *Sentient city: Ubiquitous computing, architecture, and the future of urban space*, ed. Mark Shepard. Cambridge, MA: MIT Press. 16-37. http://mixedrealitycity.org/readings/Shepard_SentientCity.pdf.

Greenfield, Adam. 2011. *Beyond the 'Smart City'*.
<http://urbanscale.org/2011/02/17/beyond-the-smart-city/>

Hollands, Robert G. 2008. "Will the Real Smart City Please Stand Up?" *City* 12 (3): 303–20.
<http://www.tandfonline.com/doi/abs/10.1080/13604810802479126>

Week 3. Creative citizenship

This week we further focus on the question how new media technologies may be used to leverage the creative potential of urbanites as active shapers of their own living conditions.

de Lange, Michiel, and Martijn de Waal. 2013. "Owning the City: New Media and Citizen Engagement in Urban Design." *First Monday, special issue "Media & the city"* 18 (11).
<http://firstmonday.org/ojs/index.php/fm/article/view/4954/3786>.

Saunders, Tom, and Peter Baeck. 2015. *Rethinking Smart Cities From the Ground Up*. London: Nesta.
<http://bit.ly/1N5t3JL>.

Optional

Frei, Hans, and Marc Böhlen. 2010. "Micropublicplaces." In *Situated Technologies Pamphlet Series*, eds. Omar Khan, Trebor Scholz and Mark Shepard. New York: The Architectural League of New York. (only the first part: pp. 12-28). <http://www.situatedtechnologies.net/files/ST6-MicroPublicPlaces.pdf>.

Graham, Stephen, and Alessandro Aurigi. 1997. "Virtual Cities, Social Polarization, and the Crisis in Urban Public Space." *Journal of Urban Technology* 4 (1): 19-52.
<http://www.tandfonline.com/doi/pdf/10.1080/10630739708724546>.

Vajjhala, Shalini. 2005. "Integrating Gis and Participatory Mapping n Community Development Planning." In *25th Annual ESRI User Conference, San Diego, CA, July 25–29 2005*.
<http://proceedings.esri.com/library/userconf/proc05/papers/pap1622.pdf>.

Max Craglia and Carlos Granell (Eds.) 2014. *Citizen Science and Smart Cities Report of Summit Ispra, 5-7th February 2014*. http://digitalearthlab.jrc.ec.europa.eu/Citizen_Science_and_Smart_Cities_Full_Report.pdf.

Week 4. Playful City

How can play and games be used to reprogram the city in creative ways? In this week we explore the intersections between urbanity and play and games by focusing on pervasive urban games, gamification, and gameful design.

Foth, Marcus, Andrew Hudson-Smith, and Dean Gifford. 2016. "Smart Cities, Social Capital, and Citizens at Play: A Critique and a Way Forward." In *Research Handbook on Digital Transformations*, edited by F. Xavier Olleros and Majlinda Zhegu. Cheltenham, UK: Edward Elgar. <https://db.tt/Wwi7ynMX>.

de Lange, Michiel. 2015. "The Playful City: Using Play and Games to Foster Citizen Participation." In *Social Technologies and Collective Intelligence*, edited by Aelita Skaržauskienė, 426-434. Vilnius: Mykolas Romeris University. <http://bit.ly/1hWbkeb>.

Sicart, Miguel. 2016. "Play and the City." *Navigationen special issue "Playin' the City: Artistic and Scientific Approaches to Playful Urban Arts"* no. 16 (1): 25-40. http://dokumentix.ub.uni-siegen.de/opus/volltexte/2016/1004/pdf/Navigationen_Playin_the_city.pdf.

Videos

McGonigal, Jane. 2010. "Gaming can make a better world". *TED Talk*.
http://www.ted.com/talks/jane_mcgonigal_gaming_can_make_a_better_world.html. (20 min.).

Squire, Kurt. 2013. "Civic Engagement Through Digital Games."
<http://www.edutopia.org/kurt-squire-games-civic-engagement-video> (9 mins.)

Optional

Gordon, Eric, and Jessica Baldwin-Philippi. 2014. "Playful Civic Learning: Enabling Lateral Trust and Reflection in Game-based Public Participation." *International Journal of Communication* Vol. 8.
<http://ijoc.org/index.php/ijoc/article/view/2195/1100>.

Debord, Guy-Ernest. 1956, 1958. "A User's Guide to Détournement" + "Theory of the Dérive". Available on
<http://www.bopsecrets.org/SI/index.htm>. [classic Situationist texts about playful subversive practices].

Juul, Jesper. 2011. "Gamification Backlash Roundup". Blogpost on:
<http://www.jesperjuul.net/ludologist/gamification-backlash-roundup> (+ blog comments!)

Licoppe, Christian, and Yoriko Inada. 2010. "Locative Media and Cultures of Mediated Proximity: the Case of the Mogi Game Location-Aware Community." *Environment and Planning D: Society and Space* 28 (4): 691-709. <http://www.envplan.com/abstract.cgi?id=d13307>.

Tan, Ekim. 2014. *Negotiation and Design for the Self-Organizing City: Gaming as a Method for Urban Design*. Delft: Delft University of Technology, Faculty of Architecture and the Built Environment, Department of Urbanism. (Ch. 3 "City Gaming for the Self-Organizing City" pp. 107 – 140). <https://db.tt/OC77dxkx>.

Recommended websites

<http://urban360.me/2012/08/24/if-urban-life-is-a-game-smart-cities-are-the-playgrounds/>

<http://civicmediaproject.org/works/civic-media-project/index>.

Week 5. Data City

In week 5 we focus on the role of digital media technologies in (re)creating urban subjectivities, by looking at the role of (big) data and the 'Quantified self' movement.

Handler, Reinhard A., and Raul Ferrer Conill. 2016. "Open Data, Crowdsourcing and Game Mechanics. A Case Study on Civic Participation in the Digital Age." *Computer Supported Cooperative Work (CSCW)* no. 25 (2):153-166. <http://link.springer.com.proxy.library.uu.nl/article/10.1007/s10606-016-9250-0>.

Nafus, Dawn, and Jamie Sherman. 2014. "This One Does Not Go Up To Eleven: The Quantified Self Movement as an Alternative Big Data Practice." *International Journal of Communication* no. 8:1784–1794.
<http://ijoc.org/index.php/ijoc/article/download/2170/1157>.

Whitson, Jennifer R. 2013. "Gaming the Quantified Self." *Surveillance & Society* 11 (1/2): 163-176.
http://www.click4it.org/images/1/1f/Gaming_the_Quantified_Self_Whitson.pdf.

Optional

Jensen, Klaus Bruhn. 2013. "How to do Things with Data: Meta-Data, Meta-Media, and Meta-Communication." *First Monday* 18 (10). <http://firstmonday.org/article/view/4870/3751>.

Tufekci, Zeynep. 2014. "Engineering the public: Big Data, Surveillance and Computational Politics." *First Monday* 19 (7). <http://firstmonday.org/ojs/index.php/fm/article/view/4901/4097>.

Recommended special journal issue: <http://link.springer.com/journal/10606/25/2/page/1>

Week 6. Maker City

In this week we pay attention to new modes of craftsmanship and makership as civic-driven creative urban practices.

Anderson, Chris. 2012. *Makers: The New Industrial Revolution*. 1st ed. New York: Crown Business. Ch.2 "The New Industrial Revolution" & Ch. 3 "The History of the Future" pp. 17-51. <http://tinyurl.com/pu8begz>. [pw: creativecities]

Diez, Tomas, and Alex Posada. 2013. The Fab and the Smart City: The Use of Machines and Technology for the City Production by its Citizens. In *Proceedings of the 7th International Conference on Tangible, Embedded and Embodied Interaction*. Barcelona, Spain: ACM. <http://dl.acm.org.proxy.library.uu.nl/citation.cfm?id=2460725>.

Veeckman, Carina, and Shenja van der Graaf. 2015. "The City as Living Laboratory: Empowering Citizens with the Citadel Toolkit." *Technology Innovation Management Review* no. 5 (3). <http://timreview.ca/article/877>.

Week 7. Critical reflections: the too smart city?

In the final week we pay specific attention to critical notes made about the media city. This includes the omnipresence of surveillance technologies, the pervasive practices of data gathering, the rhetoric of participation, and mechanisms of inclusion and exclusion.

Crang, Mike, and Stephen Graham. 2007. "Sentient cities: Ambient Intelligence and the Politics of Urban Space." *Information, Communication & Society* 10 (6): 789-817. <http://www.informaworld.com/10.1080/13691180701750991>

Crandall, Jordan. 2010. "The Geospatialization of Calculative Operations: Tracking, Sensing and Megacities." *Theory, Culture & Society* 27 (6): 68-90. <http://tcs.sagepub.com.proxy.library.uu.nl/content/27/6/68.full.pdf+html>.

Söderström, Ola, Till Paasche, and Francisco Klauser. 2014. "Smart Cities as Corporate Storytelling." *City* 18 (3):307-320. <http://dx.doi.org/10.1080/13604813.2014.906716>.

Optional

Hulsey, Nathan, and Joshua Reeves. 2014. "The Gift That Keeps on Giving: Google, Ingress, and the Gift of

Surveillance." *Surveillance and Society* 12 (3): 389–400. <http://tinyurl.com/zbtxu3g>

Long, Joshua. 2013. "Sense of Place and Place-Based Activism in the Neoliberal City." *City: Analysis of Urban Trends, Culture, Theory, Policy, Action*, 17:1, 52-67.
<http://www.tandfonline.com/doi/abs/10.1080/13604813.2012.754186>.

Jacobs, Jane. 1992. *The Death and Life of Great American Cities*. Vintage Books ed. New York: Vintage Books (originally published in 1961). Original edition, 1961. Ch. 2: "The Uses of Sidewalks: Safety" (pp. 29-54).
http://www.gwu.edu/~art/Temporary_SL/177/pdfs/Jacobs_Part_1.pdf.

Mann, Steve, Jason Nolan, and Barry Wellman. 2003. "Sousveillance: Inventing and Using Wearable Computing Devices for Data Collection in Surveillance Environments." *Surveillance & Society* 1 (3): 331-355.
<http://queens.scholarsportal.info/ojs/index.php/surveillance-and-society/article/view/3344>

Deleuze, Gilles. 1990. "Postscript on the societies of control." *L'autre journal*,
<http://www.nadir.org/nadir/archiv/netzkritik/societyofcontrol.html>.

Solove, Daniel. 2005. *Of Privacy and Poop: Norm Enforcement via the Blogosphere*. (June 30, 2005).
<http://balkin.blogspot.com/2005/06/of-privacy-and-poop-norm-enforcement.html>.

Optional material about media art, design and urban life

Below some more material about locative media, digital art and urban screens, and how these media provide alternative perspectives to smart city discourses.

Texts

Galloway, Anne. 2004. "Intimations of Everyday Life: Ubiquitous Computing and the City." *Cultural Studies* 18 (2/3): 384-408. http://www.purselipsquarejaw.org/papers/galloway_culturalstudies.pdf.

Paul, Christiane. 2008. "Digital art." 2nd ed, *World of art*. London ; New York: Thames & Hudson. (pp. 216-237). <https://db.tt/4DzCiNj5>.

Picon, Antoine. 2008. "Toward a City of Events: Digital Media and Urbanity." *New Geographies* 0: 32-43.
http://cuma.periplurban.org/wp-content/uploads/2008/06/picon_digitalmediaandurbanity.pdf.

Tuters, Marc, and Kazys Varnelis. 2006. *Beyond locative media*.
http://networkedpublics.org/locative_media/beyond_locative_media.

Videos about 'critical design'

- Mark Shepard / Sentient City Survival Kit (5 min.) <http://survival.sentientcity.net>.
- Dunne & Raby about 'critical design' (7 min.) <http://www.youtube.com/watch?v=-bns4qcRRYY>.
- RedSheep – Critique on Critical Design (5 min.) http://www.youtube.com/watch?v=-FTTamBXo_w

Recommended websites

<http://cuma.periplurban.org>.
<http://www.medienkunstnetz.de>.
<http://uranus.media.uoa.gr/hc2/onlineresource/>
<http://vagueterrain.net>.